

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. *(Previously amended)*
A method of constructing a self-standing reinforced soil arch comprising
 - (a) placing a pair of parallel temporary footings on the ground of the location where the soil arch is to be erected;
 - (b) placing on the pair of parallel temporary footings an archway form which straddles the pair of parallel temporary footings;
 - (c) erecting adjacent to and on the form a combination of alternating and interacting layers of compacted mineral soil and reinforcement material which combination supports both the dead load of the soil arch and the live load imposed on the soil arch without applying any appreciable permanent weight to the form;
 - (d) connecting the archway form to the reinforced soil; and
 - (e) removing the pair of parallel temporary footings.
2. *(Previously amended)*
A method as claimed in claim 1 wherein the archway form is installed for initially supporting the combination of compacted soil and reinforcement material.
3. *(Previously amended)*
A method as claimed in claim 1 wherein the archway form is supported by the reinforced soil.
4. *(Previously amended)*
A method as claimed in claim 3 wherein the archway form is connected to the compacted soil and reinforcement material by wire mesh, bars, or connection members so that the archway form moves with the reinforced soil.
5. *(Previously amended)*
A method as claimed in claim 1 wherein the reinforcement material consists of geosynthetic, plastic, metal, or wood.

6. *(Previously amended)*

A method as claimed in claim 1 wherein the soil arch may be in the form of a reentrant arch, a vertical or horizontal ellipse, a pear or box-shaped structure, or a curved overpass or underpass structure.

7. *(Previously amended)*

A method as claimed in claim 1 wherein the reinforced soil arch is constructed of a combination of corrugated steel, woven geotextile and wire mesh, the wire mesh being inserted through pre-drilled holes in the corrugated steel.

8. *(Cancelled)*9. *(Previously amended)*

A method as claimed in claim 1 where the reinforcement material comprises woven geotextile.

10. *(Previously amended)*

A method as claimed in claim 1 where the reinforcement material is not connected to the form.

11. *(Previously amended)*

A self-standing reinforced soil arch comprising:

(a) a pair of parallel temporary footings on a ground site;

(b) an archway form which straddles the pair of temporary footings;

(c) an archway adjacent to and on the form constructed of a combination of alternating and interacting layers of compacted mineral soil and reinforcement material which combination supports both the dead load of the soil arch and any live load imposed on the soil arch without applying any appreciable permanent weight to the form; the form is attached to the reinforced soil but not necessarily the soil reinforcement, the pair of parallel temporary footings being removed after the soil arch is formed.

12. *(Previously amended)*

A reinforced soil arch as claimed in claim 11 wherein the reinforcement material consists of geosynthetic, plastic, metal, or wood.

13. *(Previously amended)*

A reinforced soil arch as claimed in claim 11 wherein the reinforced soil arch may be in the form of a reentrant arch, a vertical or horizontal ellipse, a pear or box-shaped structure, or a curved overpass or underpass structure.

14. *(Previously amended)*

A reinforced soil arch as claimed in claim 11 wherein the reinforced soil arch is constructed of a combination of corrugated steel, woven geotextile and wire mesh or bars, the wire mesh being inserted through pre-drilled holes in the corrugated steel.

15. *(Cancelled)*16. *(Original)*

A reinforced soil arch as claimed in claim 11 where the soil reinforcement is connected to the form.

17. *(Original)*

A reinforced soil arch as claimed in claim 11 where the soil reinforcement is not connected to the form.

18. *(Currently amended)*

A reinforced soil arch as claimed in claim 11 wherein the soil and reinforcement material are a combination of layers of compacted mineral soil and woven geotextile.